

Product datasheet for MC202732

Csf1r (NM_007779) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Csf1r (NM_007779) Mouse Untagged Clone
Tag: Tag Free
Symbol: Csf1r
Synonyms: Fms, CD115, Csfmr, Fim-2, CSF-1R, M-CSFR, AI323359
Mammalian Cell Selection: Neomycin
Vector: PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC066863 sequence for NM_007779
 CCAGATTCTGCCTCTTCCTCTGTTCCCTTTTCAGGCAACCTAAAAAAAAAAAAAAAAAGGGGAAGAG
 GAGCCAGTGCAACAGACAGGAACGTGTTTCATCTGTTCCCGTCCACAGAACTAGCAGCTGGGAGCCCCG
 TGCCAGCCGACTCTCCAACTGCATCGGCTCAGCTATCCCCTGGAGGCTATGGAGTTGGGGCCTCCTC
 TGGTCCTGCTGCTGGCCACAGTTTGGCATGGTCAGGGGGCCCTGTCATCGAGCCTAGTGGCCAGAACT
 GGTTGTAGAGCCGGTGAAACGGTGACCCTGCGATGTGTGAGCAATGGCAGTGTGGAATGGGATGGCCCC
 ATCTCTCCCTACTGGACCTTGGACCCTGAATCTCCCGAAAGCACCTGACCACAAGAAACGCGACCTTCA
 AAAACTGGGACCTACCGTTGTACCGAGCTTGAAGACCCATGGCAGGCAGTACCACCATCCACTTGTA
 TGTCAAAGATCCGGCCACTCTTGAATTTGCTGGCACAGGAGGTGACAGTGGTTGAGGGCCAGGAAGCT
 GTGCTGCCCTGTCTGATCACTGACCCTGCACTGAAGGACAGTGTCTCACTGATGCGTGAGGGGGCAGGC
 AGGTCTTACGCAAAACGGTCTACTTCTTCTCGCCATGGCGAGGGTTCATTATCCGCAAGGCTAAAGTCTT
 TGACAGCAATACCTACGTGTGCAAGACCATGGTGAATGGTAGGAATCCACCTCCACTGGCATCTGGCTT
 AAGGTGAATCGAGTCCACCCAGAGCCCCACAGATAAAATTTGGAGCCTAGCAAGCTGGTGCGGATTTCGAG
 GGGAGGCTGCGCAGATCGTGTGCTCGGCCACTAACGCCGAAGTGGGATTCAACGTTATCCTCAAACGTGG
 AGACACCAAGCTGGAAATCCCCCTAAACAGTGACTTCCAAGATAACTATTATAAAAAAGTCCGGGCTCTC
 AGTCTCAACGCTGTGGACTTCCAAGACGCTGGCATATATTCTTGTGTGGCCAGCAATGATGTTGGCACAC
 GCACGGCCACCATGAACTTCCAGGTGGTGGAGAGTGCCTACTTAACTTGACCTTGAGCAGAGCCTCTT
 GCAGGAGGTGTCTGTGGGTGACAGCCTCATCTCACGGTCCATGCAGATGCCTACCCTAGCATAACAGCAT
 TACAATGGACCTACCTAGGTCCATTCTTTGAAGACCAGCGCAAGCTTGAGTTTATACCCAAAGGGCCA
 TATACAGGTACACATTCAAGCTCTTTCTGAACCGTGAAAAGGCCTCAGAGGCGGGCCAGTACTTCTTAAT
 GGCACAAAACAAGGCAGGCTGGAATAATCTGACCTTTGAGCTCACCTGCGATATCCCCAGAGGTGAGT
 GTTACATGGATGCCTGTGAATGGCTCTGATGTCCTGTTCTGTGACGTCTCTGGGTACCCTCAGCCCAGCG
 TGACATGGATGGAGTGCAGGGGCCACACCGATAGGTGTGATGAAGCCCAGGCTTTGCAGGTTTGAATGA
 CACCCACCCTGAAGTCTGAGTCAGAAGCCCTTCGACAAAGTATTCAGAGCCAGCTGCCATTGGG
 ACCTTAAAACACAACATGACTTATTTTTGCAAAACCCACAACAGTGTGGGTAACAGCTCTCAGTACTTCA
 GGGCCGCTCCCTAGGACAAAGCAAGCAGCTCCCCGATGAGTCCCTTCTCACTCCGGTGGTGGTGGCCTG
 TATGCTGTCTGCTCTGCTGGTGTACTGCTGTGGCTGCTCTGTACAAGTACAAGCAGAAGCCGAAG



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TACCAGGTGCGCTGGAAGATCATCGAGAGATACGAAGGCAATAGCTACACCTTCATTGACCCTACTCAGT
 TGCCCTACAATGAGAAGTGGGAGTTCCCTCGGAACAACCTGCAGTTTGGTAAGACTCTAGGAGCCGGTGC
 CTTTGGGAAGGTGGTGGAGGCTACAGCCTTTGGTCTGGGCAAAGAAGATGCAGTGTGAAGGTGGCTGTG
 AAGATGCTAAAGTCCACGGCTCATGCTGATGAGAAGGAGGCCCTGATGTCAGAGCTGAAGATCATGAGTC
 ACCTGGGACAGCAGAGAATATAGTCAACCTCTGGGAGCCTGTACTCACGGAGGACCTGTCTGGTTCAT
 CACTGAATACTGCTGCTATGGAGACCTACTCAACTTTCTCCGAAGGAAGGCCGAGGCTATGCTAGGACCC
 AGCCTGAGTCCTGGTCAGGACTCCGAGGGAGACTCCAGTACAAGAACATCCACCTGGAGAAGAAATATG
 TGCGCAGGGACAGTGGCTTCTCCAGTCAGGGTGTAGACACCTACGTGGAGATGAGGCCTGTCTCGACTTC
 TTCAAGTGACTCCTTCTTAAGCAAGATCTGGACAAAGAGGCCAGCCGGCCCTGGAGCTCTGGACCTG
 CTCCACTTCTCCAGCAAGTGGCTCAGGGCATGGCCTTCTTGCTTCTAAAACTGCATCCACCGGGACG
 TAGCAGCTCGAAACGTGCTGTTGACCAGCGGACATGTGGCCAAGATTGGGGACTTTGGACTGGCTAGGGA
 CATCATGAATGACTCCAATACTGTTGTCAAGGGCAATGCCCGCCTGCCTGTAAAGTGGATGGCCCCAGAG
 AGCATCTTTGACTGCGTCTACACAGTTCAGAGTGTGTGGTCTACGGCATCCTCTCTGGGAGATCT
 TCTCGCTTGGTCTGAACCCCTACCCGGCATCCTAGTGAACAACAAGTTCTACAACTGGTGAAGGATGG
 ATACCAAATGGCCAGCCTGTATTGACCGAAGAACATATACAGCATCATGCAGTCTGTGGGACCTG
 GAGCCTACCAGAAGACCCACCTTCCAACAGATCTGCTTCTCCTCCAGGAGCAGGCCGACTGGAGAGGA
 GAGACCAGGACTATGCTAACCTGCCAAGCAGCGGTGGCAGCAGCGGCAGTGACAGTGGTGGTGGCAGCAG
 CGGTGGCAGCAGCAGTGAGCCAGAAGAGGAGAGCTCCAGTGAACACCTGGCCTGTGTGAGCCAGGGGAC
 ATCGCCAGCCCTGTGTCAGCCTAACAACTACCAGTTCTGCTGAAGTGGGAGGGAGAGCCGAGTCTGC
 CGCTCTACGTCCCAGCTTGGTCTCCTCCATGGCAGGGCGACATGGGGAGAACATATGGACTTCGCCC
 TCAGCTTGGCCAGCTCTGACACTTCAGAACATGAGGGGTCTGGGGAGGTGAGAGCCCGTTTGTTC
 AGAGCCTGGGCCATCACTGCCAGTGGGGTCTCACAGTGTAGCCTCTATATTTACTATGCCAACTGGTG
 CACCCTAGTTCTTTTCTCCATCCTATTCCCATTTAAAAAACCCTCCAAACTCTCGTGTTCATG
 GAAAGACTGATTTATGTCTCAAAAGACAAGAGTCTCAAAGGCTGTGGGTAAAGTGAAGGCTTGCCTCCCT
 GACAGATGCTTAGACTACAGGCTTCTTGGGACAGGTGGCCCTTCTTAAGCTCACAGGAGTGCCACCAC
 TCTTGACCTTCACTCTGTCTATAGTCCCGCCTCATCCTGGATCTTGTACTGAGCGGCAGTAAAAGTGT
 CTACCCAGTGCCTGTCACTCTAGACTGGAAGGTATGGGGCTGATGCAAGGCTGACCACACCAACAAAC
 ACCGTGTCTCCTCCTCAAGCTGACTCGCCCTCATTAAGTGTCAACATTAACAACTAACAGCATTAAACAAA AAAAAAAAAAAAAA

- Restriction Sites:** RsrII-NotI
- ACCN:** NM_007779
- Insert Size:** 2934 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
- RefSeq:** [BC066863](#), [AAH66863](#)

RefSeq Size: 3793 bp

RefSeq ORF: 2934 bp

Locus ID: 12978

Cytogenetics: 18 34.41 cM

Gene Summary: Tyrosine-protein kinase that acts as cell-surface receptor for CSF1 and IL34 and plays an essential role in the regulation of survival, proliferation and differentiation of hematopoietic precursor cells, especially mononuclear phagocytes, such as macrophages and monocytes. Promotes the release of proinflammatory chemokines in response to IL34 and CSF1, and thereby plays an important role in innate immunity and in inflammatory processes. Plays an important role in the regulation of osteoclast proliferation and differentiation, the regulation of bone resorption, and is required for normal bone and tooth development. Required for normal male and female fertility, and for normal development of milk ducts and acinar structures in the mammary gland during pregnancy. Promotes reorganization of the actin cytoskeleton, regulates formation of membrane ruffles, cell adhesion and cell migration, and promotes cancer cell invasion. Activates several signaling pathways in response to ligand binding. Phosphorylates PIK3R1, PLCG2, GRB2, SLA2 and CBL. Activation of PLCG2 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate, that then lead to the activation of protein kinase C family members, especially PRKCD. Phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, leads to activation of the AKT1 signaling pathway. Activated CSF1R also mediates activation of the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1, and of the SRC family kinases SRC, FYN and YES1. Activated CSF1R transmits signals both via proteins that directly interact with phosphorylated tyrosine residues in its intracellular domain, or via adapter proteins, such as GRB2. Promotes activation of STAT family members STAT3, STAT5A and/or STAT5B. Promotes tyrosine phosphorylation of SHC1 and INPP5D/SHIP-1. Receptor signaling is down-regulated by protein phosphatases, such as INPP5D/SHIP-1, that dephosphorylate the receptor and its downstream effectors, and by rapid internalization of the activated receptor.
[UniProtKB/Swiss-Prot Function]